

SECTION 15160

STORM DRAINAGE PIPING

EDIT TO SUIT PROJECT

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Pipe, pipe fittings, and accessories.

1.2 LANL PERFORMED WORK

- A. LANL's support services subcontractor will inspect interior of storm drainage lines beyond the building wall with video camera for piping integrity and proper construction.

1.3 SUBMITTALS

- A. Submit the following in accordance with Section 01300:
 - 1. Catalog data on pipe materials, fittings and accessories.
 - 2. Installation instructions for accessories.

PART 2 PRODUCTS

2.1 PRODUCT SUBSTITUTION

- A. Refer to Section 01630.

2.2 STORM WATER PIPING, BURIED

- A. Cast Iron Pipe and Fittings: ASTM A74, service weight.
 - 1. Joints: Bell and spigot, ASTM C564 rubber gaskets.
- B. PVC Pipe and fittings: ASTM D3034, SDR 35.
 - 1. Joints: Bell and spigot, ASTM D3212 rubber gaskets.
- C. PVC Pipe and Fittings: ASTM D3034 or ASTM D2665.
 - 1. Joints: Solvent weld, ASTM D2855, with ASTM D2564 solvent cement.

2.3 STORM WATER PIPING, ABOVE GROUND

- A. Cast iron pipe and fittings: CISPI 301 hubless, service weight.
 - 1. Joints: C1SP1310, neoprene gaskets and stainless steel clamp/shield assemblies.
- B. Cast iron pipe and fittings: ASTM A74 service weight.
 - 1. Joints: Bell and spigot, ASTM C564 rubber gaskets.

2.4 ROOF DRAINS

- A. Manufacturer: J.R. Smith Mfg. Co.
- B. [Select roof drains determined by roof construction, expected rainfall, etc. Refer to manufacturer's catalog data for selection criteria.]

2.5 CLEANOUTS

- A. Manufacturer: J.R. Smith Mfg. Co.
- B. [Select cleanouts to suit project. Refer to manufacturer's catalog data for selection criteria.]

2.6 MANHOLES

- A. Provide precast concrete manhole per details shown on the Drawings.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify excavations are to required grade. Do not over excavate.

3.2 PREPARATION

- A. Ream pipe ends and remove burrs.

3.3 TIE-INS

- A. Tie-ins to existing piping, manholes, and equipment shall be coordinated with and performed by LANL's support services subcontractor. Contractor shall provide materials for tie-in and perform necessary excavation and work to prepare area.

3.4 STORM LINE COVER

REFER TO CIVIL DRAWING ST3211 FOR TRENCHING DETAIL.

- A. Provide cover, bedding, warning tape and tracer wire per trench details. Refer to Section 02225, Trenching.

3.5 INSTALLATION

- A. Comply with Uniform Plumbing Code.
- B. Extend cleanouts to finished floor or wall surface. Lubricate threaded cleanout plugs with non-hardening thread lubricant. Ensure clearance at cleanout for snaking drainage system.
- C. Encase exterior cleanouts in concrete, flush with grade, when exposed to traffic.
- D. Install floor cleanouts at elevation to accommodate finished floor.
- E. Route piping in orderly manner and maintain gradient. Route parallel and perpendicular to walls.
- F. Install piping penetrating roofed areas to maintain integrity of roof assembly.

- G. Install bell and spigot pipe with bell end upstream.
- H. Sleeve and caulk pipes passing through partitions, walls and floors. Refer to Section [15060].
- I. Test piping system with water in accordance with Section 15992.
- J. Label piping and install underground warning tape in accordance with Section 15190.
- K. Support piping in accordance with Section [15060].

3.6 LANL ACCEPTANCE INSPECTION AND TESTING

- A. LANL Construction Inspector will contact F-4 to arrange for video inspection of interior of piping system beyond building wall. LANL's support services subcontractor will perform inspection.

END OF SECTION